

**IN THE CLAIMS:**

Claims 28-30 were previously canceled. Withdrawn claims 1-26 and 31-46 are canceled herein. Claims 27 and 47 have been amended herein. Claims 48-52 have been added herein. This listing of claims replaces all prior versions and listings of claims in the application. Please enter these claims as amended.

**Listing of Claims:**

1. - 26. (Canceled).

27. (Currently amended) A method of producing a pharmaceutical, said method comprising:

identifying a protein that is cleaved in a subject's body by a peptidase to form a peptide having an activity as well as peptide fragments, and analyzing said peptide fragments for biological activity, said peptide fragments comprising peptides consisting of three (3) to nine (9) amino acids in length;

entering data obtained from analyzing said peptide fragments for biological activity into a peptide compound database;

determining the identity of a peptide compound that modulates an activity selected from the group consisting of development of the systemic inflammatory response, release of other inflammatory mediators, regulation of members of the nuclear factor- $\kappa$ B family, accentuation of sepsis or protection from sepsis, nitrate production, nitric oxide production, glucose tolerance and combinations thereof, wherein determining the identity of the peptide compound comprises ~~searching a peptide~~ said peptide compound database comprising peptides consisting of three (3) to nine (9) amino acids in length;

conducting therapeutic profiling of the peptide compound for efficacy and toxicity in animals; and

formulating a pharmaceutical preparation including one or more peptide compounds identified as having ~~an an acceptable therapeutic profile~~ efficacy and toxicity in animals.

28. - 46. (Canceled).

47. (Currently amended) The method according to claim 27, wherein searching a peptide compound database comprising peptides consisting of three (3) to nine (9) amino acids ~~comprises searching a peptide database comprising trimers and tetramers~~ comprises searching only trimers and tetramers of the peptide compound database.

48. (New) The method according to claim 27, wherein the biological activity of the peptide fragments is different from the activity of the peptide.

49. (New) The method according to claim 27, wherein said peptide fragments comprise peptides consisting of trimers and tetramers.

50. (New) A method of producing a pharmaceutical, said method comprising:  
identifying a protein that is cleaved in a subject's body by a peptidase to form a peptide having an activity as well as peptide fragments, and analyzing said peptide fragments for biological activity;

producing a peptide library of said peptide fragments comprising peptides consisting of three (3) to nine (9) amino acids in length;

determining the identity of a peptide compound that modulates an activity selected from the group consisting of development of the systemic inflammatory response, release of other inflammatory mediators, regulation of members of the nuclear factor- $\kappa$ B family, accentuation of sepsis or protection from sepsis, nitrate production, nitric oxide production, glucose tolerance and combinations thereof, wherein determining the identity of the peptide compound comprises searching said peptide library;

conducting therapeutic profiling of the peptide compound for efficacy and toxicity in animals; and

formulating a pharmaceutical preparation including one or more peptide compounds identified as having an acceptable efficacy and toxicity in animals.

51. (New) The method according to claim 50, wherein the biological activity of the peptide fragments is different from the activity of the peptide.

52. (New) The method according to claim 50, wherein said peptide fragments comprise peptides consisting of trimers and tetramers.